- - (Amended) A method and apparatus for emulating a computer processor architectural stack is disclosed. In the following description, for purposes of explanation, specific nomenclature is set forth to provide a thorough understanding of the present invention. However, it will be apparent to one skilled in the art that these specific details are not required in order to practice the present invention. For example, the present invention has been described with reference to the INTEL architecture floating point stack. However, the same techniques can easily be applied to other types of stacks in other computer processors. - -

a1

On page 7, please replace the paragraph beginning at line 5 with the following rewritten paragraph:

- - (Amended)To illustrate how prior art software emulators and binary translator systems handle exceptions, an example is provided. The following example illustrates the traditional approach for validating stack limitations. The following code lists a short program for 32-bit INTEL architecture processors. - -

a2

On page 7, please replace the paragraph beginning at line 10 with the following rewritten paragraph:

- - (Amended) The first line of the 32-bit INTEL architecture pushes a floating point value from a memory location <mem> onto the processor's floating point stack. The second line of code pops a value off the processor's floating point stack and puts the value into a destination memory location <dest1>. The third line of code pops a value off the processor's floating point stack and puts the value into a destination memory location <dest2>. - -

a3